UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
EUGENE DISTRICT OFFICE

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ENVIRONMENTAL ASSESSMENT NO, OR090-00-06

HULT POND BRIDGE REPLACEMENT

I. PURPOSE OF AND NEED FOR ACTION

The existing bridge was built by former property owners in 1985 and has subsequently been identified as a safety concern. The bridge is located at the south end of Hult Pond, in T. 15 S., R. 7 W., Section 26. The land use allocation within the proposed project is “Matrix”.

The current bridge is constructed on fill materials that constricts flow in the outlet channel, thus increasing pressure on the dam during periods of high flow. This bridge has a width of 13 feet and is without guardrails.

The purpose for action is to: 1) remove the constriction in the outlet channel and reduce pressure on the dam during periods of high flow. 2) improve vehicle safety, as a need to improve vehicle containment has been identified, particularly due to the high rate of both public and commercial traffic.

The proposed action is planned for FY2001 and tiered to and in conformance with the "Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents within the Range of the Northern Spotted Owl” (April 1994) and the "Eugene District Record of Decision and Resource Management Plan” (June 1995).

II. PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action and Design Features

Replace the existing bridge. Remove the road fill materials in the outlet channel and install a new precast concrete bridge, 16 feet by 89 feet, over the restored channel width. The new bridge will consist of decked bulb tee prestress concrete girders supported on piles (spill through abutments) with 2-tube side mount guardrails. (Refer to Attachment 1)

It is proposed that a silt fence system be placed at the top of the overflow channel near the existing concrete sill. It is estimated that 640 cubic yards of abutment material would be removed from the overflow channel, and 240 cubic yards of riprap would be used to armor the bank. Removed material would be delivered to the old Hult mill site, one-half mile south of the project, for disposal.

It is proposed that a silt fence be placed at the top of the overflow channel near the existing concrete sill. It is also possible that some type of silt fence curtains, attached to floating booms, might be used to facilitate settling of silt in the water column if precipitation and flow conditions are greater than is currently anticipated for the construction season (July 1st to September 15th).

The following design features would be incorporated into the project:

1. Construction of the bridge would be limited to periods of dry weather, between July 1st and September 15th.

2. All vegetative clearing debris and excess excavated materials shall be hauled and placed at the Hult Pond mill site.

3. To minimize the spread of noxious weeds, cleaning of heavy equipment prior to entering and leaving BLM land would be required.

4. To help maintain the existing native plant communities, roadsides would not be seeded with non-native species mixtures. If deemed necessary for erosion control, areas would be seeded with an annual (70%) and perennial (30%) rye mixture with strict guidelines on seed purity (little crop content and no noxious weed content).

5. Construction operations shall be modified as necessary to comply with recommended measures necessary for the protection of nesting marbled murrelets. Any measures are contingent on a pending Biological Opinion by the U.S. Fish and Wildlife Service.

6. A BLM approved hazardous material prevention, control and countermeasure plan shall be developed and an approved Hazardous Spill Containment kit shall be kept on the project site.

7. Silt fencing in the outlet channel shall be installed prior to the commencement of excavation operations.

8. The public shall be notified of the road closure a minimum of 15 days prior to the beginning of operations. Closure signs shall be installed and maintained throughout the project from all entrances.

9. Materials to construct and utilize geotextile curtains, to be used in conjunction with floating booms, will be available on the project site if precipitation and flow conditions are greater than currently anticipated for the construction season.

B. Alternatives

The alternative would be to not replace the bridge. This alternative would not lead to a widening of the channel as it was prior to 1985, or increasing vehicle safety.

III. AFFECTED ENVIRONMENT

A. Proposed Action

Soils

The proposed action is within an existing road prism, which is comprised of road fill material. No Soil resources are adversely affected by this action.

Wildlife

The project area is within 0.5 mile of a spotted owl activity center (MSNO #2122). For the past five years this site has been occupied by barred owls. In addition to the suitable habitat found within this owl center, a 15 acre stand of mature timber is located approximately 0.25 mile southeast of the proposed construction site.

The Hult Pond Bridge crosses the pond's outlet at the dam in a location devoid of vegetation. Because there is no existing habitat for either terrestrial mollusks or red tree voles, no surveys for either are required.

The project area is within 0.25 miles of unsurveyed potential habitat for the marbled murrelet. One tree was located that contained suitable habitat for marbled murrelet nesting. Murrelet status within this stand is unknown. There is a possibility that murrelet could nest in one of the few larger trees located in the younger stands around the site. Due to this possibility, construction activities could create a disturbance to nesting murrelet. Therefore, it would be assumed that this project may "Affect" and is likely to "Adversely Affect" this species.

Aquatic and Riparian Resources and Fisheries

The outlet channel is used by upstream migrating adult coho salmon, steelhead and trout. Downstream migration of salmon smolts, steelhead smolts, and adult trout also pass through this site. The outlet channel is used for spawning by introduced centrachids, as well. Salmon, trout and centrachids rear in Hult Pond.

The only threatened or endangered fish species in the project area is the coho salmon, listed by the National Marine Fisheries Service as a threatened species.

Botany

A botanical survey shall be conducted in May, 2000.

The proposed project area is within the immediate road prism, and has a history of past disturbance, and was determined to contain no suitable habitat for Survey and Manage fungal species. Thus, no fall or winter surveys would be conducted specifically for these species.

Cultural Resources

The project area is located within the Coast Range environmental province and is under the purview of Protocol D of the national Programmatic Agreement as implemented in Oregon.

A cultural resource inventory of the project areas has not been completed and is not

required. The chances of finding cultural resources in the project areas are small.

Recreation

The bridge is used by the public as a back country travel route from the Junction City area to both Hult Pond and the Triangle Lake area.

IV. ENVIRONMENTAL CONSEQUENCES

A. Unaffected Resources

The following resources either are not present or would not be affected by the Proposed Action:

1. Cultural Resources and Native American Religious Concerns
2. Wild and Scenic Rivers, Wilderness, or Areas of Critical Environmental Concern
3. Prime and unique farmlands
4. Hazardous or Solid Wastes
5. Low income and minority populations
6. Air Quality
7. Invasive Non-Native Plants
8. Wetlands and Riparian Zones

B. Affected Resources

Aquatic and Riparian Resources and Fisheries

The project work would comply with the Oregon Department of Fish and Wildlife time lines for working in stream channels. As a result, water levels in the outlet channel would be low and no fish are expected to be present in the project area during the period of work.

Water Quality

The proposed action includes excavation of abutment material from both sides of the overflow channel immediately underneath the existing bridge. This material is largely made up of gravel, cobbles and boulders, but includes sand and silt (GeoEngineers, 2000). There are materials below the abutment fill that contain fine sand to clay-sized particles; some disturbance of these materials might occur, but is anticipated to be minimal because the elevation of this material change is about where the excavation is expected to stop. Excavation of these materials is expected to occur over approximately 2-3 days. There would be a short-term, direct impact to water quality during the time this excavation takes place, and for some time afterwards (hours to days). Water in the vicinity of the approach abutments would become turbid when the abutment materials are removed, and siltation would occur along the overflow channel for some distance downstream. Due to the shallow water depths in this overflow channel, the distance downstream to the spillway, and the negligible water velocities, the majority of sand and coarse silt particles are expected to settle out of the water column along the overflow channel before reaching the spillway. Finer-silt and clay particles are expected to pass beyond the spillway, for distances of many kilometers downstream, and are anticipated to be imperceptible from the background rate of suspended sediment transported in this stream during winter storm events.

The proposed action calls for returning the channel to the width it was in 1985. This action would return both the outflow hydrograph and dam pool levels to pre -1985 conditions. The conditions that were created in 1985 created a constriction in the outflow channel that has increased pressure on the dam. Removal of the constriction would allow for outflow to increase during high flow events as they existed prior to 1985. This action, while it would increase flow to pre-1985 level and possibly contribute to additional localized flooding compared to the last 15 years, will reduce the potential for a catastrophic event and associated harm to people, property, and the downstream flood plain. If this action were taken it would limit the flooding surrounding the pond to pre-1985 levels. This would not have a large impact on the wet areas at the north end of the pond as the spillway controls the pond level at low flows. The change in the levels of the pond during more frequent peak flow events would not be large.

Wildlife

Due to the risk of disturbance to nesting murrelets, this project will undergo consultation with the U.S. Fish and Wildlife Service in the FY 2001 Biological Assessment. Concurrence from the U.S. Fish and Wildlife Service is expected in the form of a Biological Opinion (BO) by approximately December 2000. Project implementation would be in accordance with mitigation measures provided in the BO.

No suitable habitat for any federally listed or proposed species, or Survey and Manage species would be modified by this action.

(Refer to Section II, Paragraph A-5 for project design feature)

Botany

A botanical survey shall be conducted in May, 2000. This project would be modified and/or impacts mitigated to protect any Threatened, Endangered or BLM Special Status vascular plants, if any are found (Refer to Section II, Paragraph A-3 for project design feature).

Recreation

The construction of the bridge could restrict access from the Junction City area to both Hult Pond and the Triangle Lake area for a period of up to two months. The alternative to this route during construction would be Highway 36 (Refer to Section II, Paragraph A-8 for project design feature).

Cultural Resources

No cultural resources are expected to be affected. The guidelines of the Memorandum of Understanding between the Bureau of Land Management and the Oregon State Historic Preservation Officer (December 13, 1994) make the conclusion “that the chances of finding important historical properties in the area are such that further cultural resource survey prior to project implementation are so minimal that they do not justify the continued expenditure of Federal funds in this effort".

C. No Action:

The increase in flow over the spillway would not change during high flows and the pressure

on the dam would remain above the levels it was before the channel was constricted in 1985 with the placement of the existing bridge. Safety for vehicular traffic would not be improved

V. CONSULTATION AND COORDINATION

A. LIST OF PREPARERS

The following BLM resource specialists have examined the Proposed Action and provided either written or verbal input utilized in this assessment:

Dan Crannell	BLM Wildlife Biologist
Neil Armantrout	BLM Fisheries Biologist
Mary D'Aversa	BLM District Hydrologist
Mike Southard	BLM District Archaeologist
Graham Armstrong	BLM Hydrologist
Saundra Miles	BLM Recreation Planner
Kathy Pendergrass	BLM Botanist
Gary Hoppe	BLM Planner
Gerald Russell	BLM Civil Engineer
Eric Meyers	BLM Civil Engineer Technician

B. Agencies, groups and individuals consulted

Western Federal Lands Highway Division - Shawn Jones, Erosion Control Coordinator and David J. Sell, Environmental Coordinator.

U.S. Fish and Wildlife Service - This proposal will undergo formal consultation with the U.S. Fish and Wildlife Service. This project would Affect, and is Likely to Adversely Affect" the marbled murrelet due to potential disturbance to murrelets nesting in the neighboring stands of suitable habitat mentioned in the Affected Environment section of this document. If spotted owls return to site MSNO #2122, displacing the more aggressive barred owls, this action would "Affect, but is Not Likely to Adversely Affect" spotted owls due to the same disturbance mentioned for murrelets.

This action would have "No Affect" for any other federally listed or proposed species known to occur in the vicinity.

National Marine Fisheries Service - The project as proposed complies with the Terms and Conditions for Road Maintenance in the National Marine Fisheries Service Biological Opinion for the Programmatic Biological Assessment for the Oregon Coast Coho Salmon within the Oregon Coast Range Province (June 4, 1999). No further consultation on the affects of the proposed action on coho salmon is required.

VI. REFERENCES

USDA, Forest Service and USDI, Bureau of Land Management. February 1994. *Final Supplemental Environmental Impact Statement on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl.* Washington D.C.

USDA, Forest Service and USDI, Bureau of Land Management. April 1994. *Record of Decision for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl.* Washington D.C.

USDA, Forest Service and USDI, Bureau of Land Management. October 1998. *Environmental Assessment (EA) - To Change the Implementation Schedule for Survey and Manage and Protection Buffer Species.*

USDI, Bureau of Land Management. March 1999. *Lake Creek Watershed Analysis*. Eugene District Office. Eugene, OR.

USDI, Bureau of Land Management. June 1995. *Eugene District Record of Decision and Resource Management Plan.* Eugene District Office, Eugene, Oregon.

USDI, Bureau of Land Management. March 1999. *Plan Maintenance Documentation - To Change the Implementation Schedule for Survey and Manage and Protection Buffer Species*.
USDI, Bureau of Land Management and Oregon State Historic Preservation Office. 1998. Protocol Agreement.

Hult Pond Dam Safety Evaluation. June 7, 1999. AGRA Earth & Environmental, Inc. and Otak, Inc.

GeoEngineers, 2000. Drill logs of borings 99HP-1 and -2, completed January 6-7, 2000, on either end of the Hult Pond Bridge (Geotechnical Investigation).

Trow Consulting Engineers Ltd., 1996. Instream Sediment Control Techniques Field Implementation Manual., Ontario Ministry of Natural Resources, Northeast Science and Technology, FG-007.
109 p.

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EA-00-06

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PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT
Environmental Assessment No. OR090-EA-00-06

On the basis of the information contained in the Environmental Assessment, and all other information available to me, it is my determination that implementation of the proposed action will not have significant environmental impacts beyond those already addressed in the *Record of Decision (ROD) for Amendments to Forest Service and Bureau of Land Management Planning Documents Within the Range of the Northern Spotted Owl* (April 1994) and the *Eugene District Record of Decision and Resource Management Plan* (June 1995), with which this EA is in conformance, and does not constitute a major federal action having a significant effect on the human environment. Therefore, an environmental impact statement or a supplement to the existing environmental impact statement is not necessary and will not be prepared.

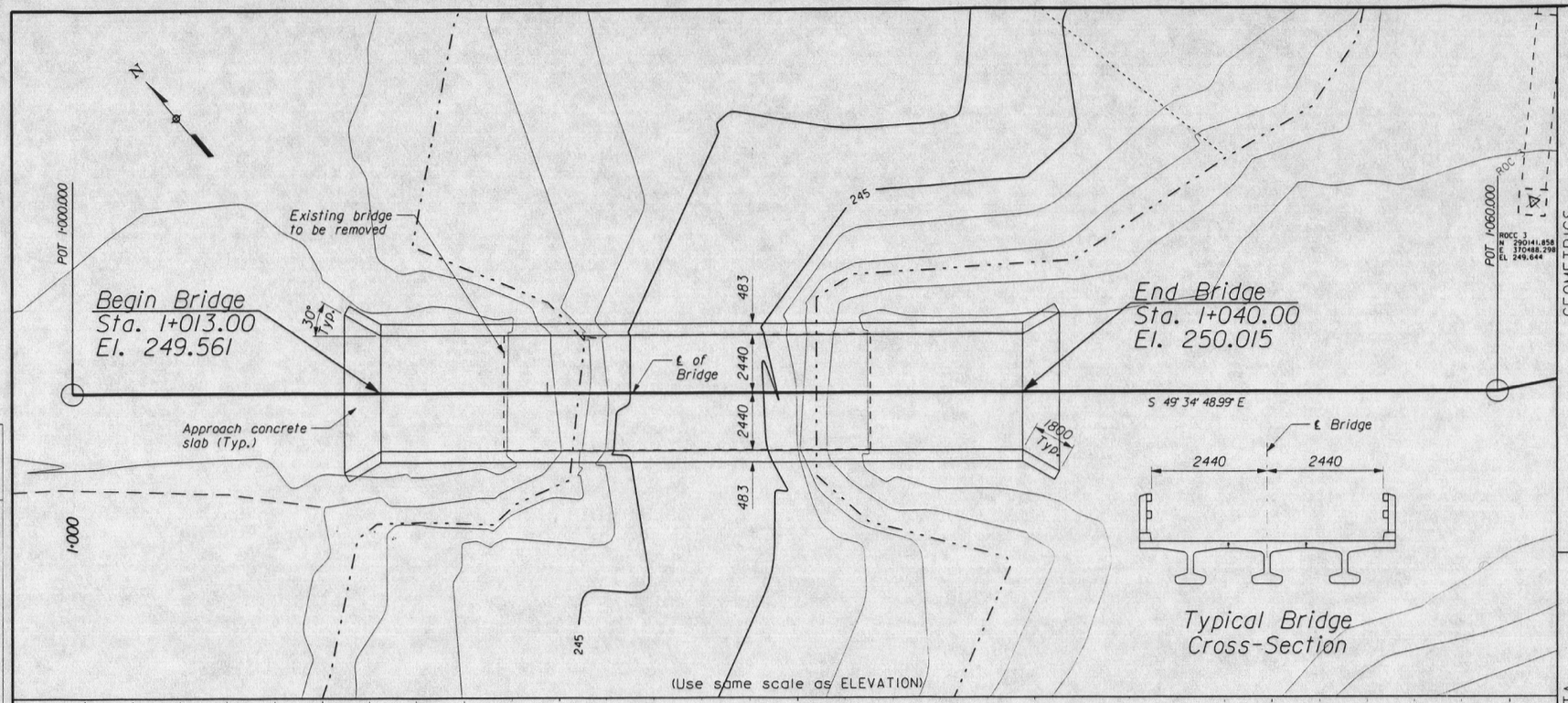
Environmental Assessment

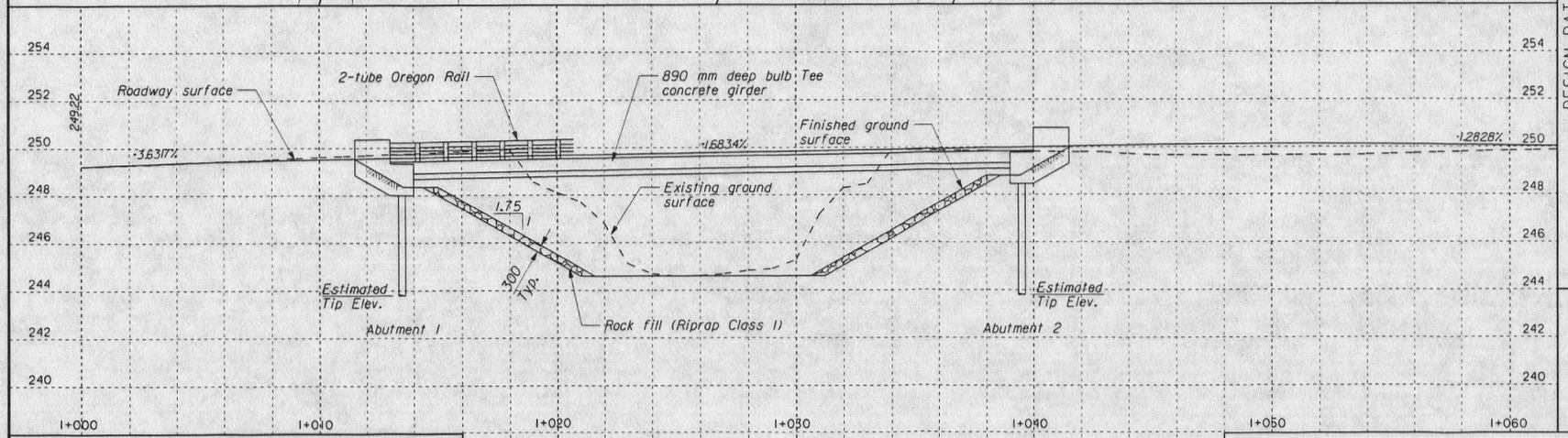
for

Hult Pond Bridge Replacement
OR 090-EA-00-06

Prepared by: Eric Meyers Date: 5-18-2000
Eric Meyers
Area Engineer, Coast Range Resource Area

Reviewed by: Gary A. Hoppe Date: 5-18-2000
Gary Hoppe
Environmental Coordinator, Coast Range Resource Area





	Q	Vm	WS EL.
Q_2	19.0	0.40	247.8
Q_{50}	55.0	0.90	248.5
Q_{100}	65.0	1.00	248.6
Q	129.0	1.50	249.4

SLOPE PROTECTION

TYPE: Rock Fill CLASS: 1 Riprap

TOP EL.: 248.4 DEPTH: 300 mm

BOTTOM EL.: 244.5 SLOPE: 1¾:1

SCOUR: 244.5

REMARKS: Qc is approximately equal to Q600 for the pond inflow.

ELEVATION

(Use same scale as PLAN both HORIZONTAL and VERTICAL)

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Date: By: Designed: Checked:

GEOMETRICS

CROWN 0.0

SUPER 0.0

GRADE DIAGRAM

DESIGN DATA

TYPICAL BRIDGE SECTION

DECKED BULB TEE

SUPERSTRUCTURE: CONCRETE GIRDER

WIDTH CURB TO CURB: 4880

RAIL: 2-TUBE OREGON RAIL

TRANSITION: NONE

SIDEWALKS: NONE

DRAINS: NONE

UTILITIES: NONE

DESIGN LIVE LOAD: MS 18 (HS 20-44)

CONCRETE STRENGTH (F'c)

SUBSTR.

SUPERSTR.

EPOXY REINFORCEMENT

SUBSTR. YES

SUPERSTR. YES

REMARKS: No wearing surface. In addition to MS18 design live load use: L70 with no impact and BU99 yarder with 25% overload.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
WESTERN FEDERAL LANDS HIGHWAY DIVISION
VANCOUVER, WASHINGTON

PRELIMINARY LAYOUT

BRIDGE NAME Hult Pond STREAM NAME Lake Creek

ROUTE NAME AND NUMBER BLM 15-7-26

STATE Oregon COUNTY Lane FOREST/PARK/OTHER BLM

ACCOUNT NO. RG NO.

PREPARED BY ESTIMATED STRUCTURE COST

CONCURRED:

PROJECT MANAGER HYDRAULIC ENGINEER GEOTECH ENGINEER